Abstract of the Disclosure

Provided are a program voltage generation circuit for achieving stable programming of a flash memory cell, and a method of programming a flash memory cell. In the program voltage generation circuit, a program wordline voltage to be applied to

5   the gate of a flash memory cell is generated in response to a sink current provided by a constant current source and the result of a comparison between a reference voltage and a bitline voltage. The bitline voltage is generated according to a program current flowing to the first flash memory cell. A bitline current control voltage is generated in response to the program current that flows to a second flash memory cell in response to

10   the program wordline voltage. Accordingly, even when the characteristics of the flash memory cell vary due to a change of a manufacturing process thereof, a constant program wordline voltage, a constant bitline voltage, and a constant bitline current control voltage are generated, and thus the flash memory cell is stably programmed.

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